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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,779	03/25/2004	Jae-Shik Kim	678-1193 (P11061)	5885

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EXAMINER

JACKSON, ANDRE L

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/808,779	Applicant(s) KIM, JAE-SHIK	
	Examiner Andre' L. Jackson	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,11,13-15 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 3-10,12,16-20 and 24-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

*DETAILED ACTION*

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,694,570 to Chen. Chen discloses a hinge device (4-6) useable with a foldable electronic apparatus comprising;

a first rotation axis (A) for opening and closing a folder (20) with respect to a terminal body (10) and a second rotation axis (B) extending perpendicular to the first rotation axis and adapted to rotate relative to the first rotation axis, the hinge device being adapted to rotate the folder about the second rotation axis in a state wherein the folder and terminal body are opened; a first hinge housing (3) coupled to the terminal body to rotate about the first rotation axis, the first hinge housing being formed with a fixing groove (**concave depression defining a central post 341**) surrounded by ribs (342) extended to a certain height at its inner peripheral surface, and an opening (**gap or space between inner edges of identically shaped opposing retaining clips within channel 300; the retaining clips each include an opening 377**) adapted to expose the fixing groove in a direction of the second rotation axis; a main shaft (41) provided at one end with a fixing end (411) having a shape corresponding to that of the fixing groove, the main shaft extending in the direction of the second rotation axis and adapted to protrude outwardly through

Art Unit: 3677

the opening of the first hinge housing at the other end thereof; and a second hinge housing (22) rotatably coupled to the other end of the main shaft protruding outwardly from the first hinge housing and adapted to rotate about the second rotation axis, the second hinge housing being fixed to the folder.

As to claims 2 and 11, the main shaft of the hinge device is adapted to penetrate from a lower end surface of the second hinge housing to an upper end surface thereof, thereby causing the one end to be protruded from the upper end surface of the second hinge housing, the protruding end of the main shaft being fastened with an e-ring (42) comprising fastening arms (Fig.5) extended outwardly from both sides of the e-ring and the fastening arms being formed with fastening holes at their opposite ends, respectively.

As to claims 22 and 23, the first hinge housing is further formed with a first guide rail (341) extending in the direction of the second rotation axis at one side of the fixing groove, and a guide groove (concave openings) formed along the direction of the second rotation axis at one surface of the guide rail facing the fixing groove; and the main shaft is further formed at its one side with a second guide rail (401) extended in the direction of the second rotation axis and adapted to be inserted into the guide groove. Further, the first guide rail defines a slit or gap, having a certain width, between a top side and an inner sidewall of the first hinge housing.

#### ***Allowable Subject Matter***

Claims 3-10, 12, 16-20 and 24-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Applicant's Arguments*

Applicant's arguments filed in the Amendment filed September 11, 2006 have been fully considered but they are not persuasive. Here, applicant believes the Examiner and/or the prior art relied upon (#6,694,570 to Chen) fail to disclose or suggest a first hinge housing having an opening adapted to expose a fixing portion/surface/groove as recited in claims 1, 15 and 21 respectively. Here, the Examiner agrees with applicant that figure 5 alone does not specifically point out the supposed structural limitation of an opening adapted to expose the fixing element as set forth in the claims above. Since, Chen does not provide a reference numeral, which designates the element or elements relied upon by the Examiner in the previous rejection, the Examiner relied on figure 5 to read along with the rejection for comprehension of said opening in question. To better clarify the structural arrangement of the limitations, the Examiner has re-worded the anticipatory limitations of the rejection of claims 1, 15 and 21 in particular. The rejection appearing in this Action, although modified for a better understanding, is not a new ground of rejection. Here, a clearer understanding of the structural limitations of the first hinge housing is as follows in bold text:

-- a first hinge housing (3) coupled to the terminal body to rotate about the first rotation axis, the first hinge housing being formed with a fixing groove (**concave depression defining a central post 341**) surrounded by ribs (342) extended to a certain height at its inner peripheral surface, and an opening (**gap or space between inner edges of identically shaped opposing retaining clips within channel 300; the retaining clips each include an opening 377**) adapted to expose the fixing groove in a direction of the second rotation axis --.

Art Unit: 3677

Therefore, the fixing groove, and the opening and the relationship of these structural limitations are clearly set forth in this Action. Consequently, the Examiner believes Chen still anticipates all of the structural limitations recited in independent claims 1, 15 and 21 as presently presented. Accordingly, claims 1, 2, 11, 13-15 and 21-23 remain unpatentable over Chen. Claims 3-10, 12, 16-20 and 24-30 are objected to.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre' L. Jackson whose telephone number is (571) 272-7067. The examiner can normally be reached on Mon. - Fri. (10 am - 6:30 pm).


Art Unit: 3677

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALJ

André L. Jackson  
Patent Examiner  
AU 3677



Katherine Mitchell  
Primary Examiner